NUCLEAR EMERGENCY PLANNING

IN DURHAM REGION

A RESEARCH REPORT

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TABLE OF CONTENTS

		Page
CHAPTER 1 -	INTRODUCTION	1
CHAPTER 2 -	GENERAL MUNICIPAL RESPONSE IN DURHAM REGION	2
CHAPTER 3 -	THE DURHAM REGIONAL POLICE FORCE	8
CHAPTER 4 -	THE DURHAM REGION SOCIAL SERVICES DEPARTMENT	12
CHAPTER 5 -	THE DURHAM REGION BOARD OF EDUCATION AND DURHAM REGION CATHOLIC SEPARATE SCHOOL BOARD	19
CHAPTER 6 -	DURHAM REGIONAL HEALTH UNIT	26
CHAPTER 7 -	DURHAM REGION FIRE HEADQUARTERS	29
CHAPTER 9 -	DURHAM REGION PUBLIC WORKS DEPARTMENT	32

NUCLEAR EMERGENCY PLANNING IN DURHAM REGION

CHAPTER 1

INTRODUCTION

1.0.1 The purpose of this report is to assess the current state of nuclear emergency planning in Durham Region and to suggest ways in which the Region can become better prepared to deal with a nuclear emergency.

1.0.2 This report is intended to be read in conjunction with the Guide to Municipal Nuclear Emergency Planning (referred to hereafter as "Guide"). It follows a similar outline, discussing the responsibilities assigned to each regional department in individual chapters.

1.0.3 Part of the research for this document involved interviews with representatives of the regional departments discussed in the report. A list of these individuals is in Annex A attached at the end of this report.

1.0.4 The current Regional Nuclear Emergency Plan assigns certain tasks to the OPP detachment, Whitby. It would appear appropriate to exclude this detachment from this plan. The detachment will play a part in the Joint Traffic Control Plan, and its role will be documented there.

1.0.5 Education of the public regarding nuclear emergencies is at present inadequate. However, this subject has not been discussed in this report since it is now mainly the responsibility of the Province.

CHAPTER 2

GENERAL MUNICIPAL RESPONSE IN DURHAM REGION

SECTION 1

INTRODUCTION

1.0.1 Refer to Guide, Chapter 2 (pages 2-13).

1.0.2 Few departments in the region seem aware of the potential magnitude of the planning and preparations required to adequately respond to a nuclear emergency at the Pickering Nuclear Generating Station.

1.0.3 The density of the population surrounding the generating station distinguishes it from other such sites in the province. More than 100,000 inhabitants of Durham and Scarborough live within a 10 km radius of the plant. Approximately 72,000 Durham residents live in this Primary Zone. Departmental planning on all levels must take into account the number of people who may be affected by a nuclear emergency.

1.0.4 Each department in the region needs to increase its level of nuclear emergency preparedness through increased emergency planning.

1.0.5 Top priorities for regional planning include the selection and planning for Reception and Evacuee Centres, and the development of a Traffic Control Plan and plans for public notification.

SECTION 2

NOTIFICATION

2.0.1 Refer to Guide, Chapter 2, Section 2 (pages 2-4).

2.1 Initial Notification

2.1.1 Initial notification procedures are well established in Durham Region.

2.1.2 Business and residence telephone numbers for members of the Regional Emergency Control Group and their designated alternates are included in the Regional Nuclear Emergency Plan. A prepared notification message is also contained in the plan.

2.2 Public Notification

2.2.1 Public Address Systems. Police cars equipped with sound systems will alert inhabitants of affected response sectors to a nuclear emergency and cause them to listen to designated radio stations for further instructions.

2.2.2 Alerting routes through each response sector have not been identified; nor has an estimation been made of the number of vehicles that will be required to complete notification.

2.2.3 In order to ensure that the public is alerted as quickly as possible, these plans should be made prior to an emergency.

2.2.4 News Media. The radio stations CHOO and CKAR have been designated to broadcast information during a nuclear emergency. No formal arrangements have been made with these stations, although this should be done in advance. A contract or letter of agreement which specifies the responsibilities of the stations during a nuclear emergency should be drafted.

2.2.5 A means of contacting both stations on a 24-hour basis also needs to be established. It may also be advisable to provide stations with prepared warning messages.

2.2.6 The Region should consider designating television stations for emergency broadcast services along with the radio stations which have been chosen. This should be done in consultation with the Province.

2.2.7 The Region has no arrangements for notifying water craft on Lake Ontario, should this become necessary.

SECTION 3

REGIONAL EMERGENCY CONTROL CENTRE

3.0.1 Refer to Guide, Chapter 2, Section 3 (pages 4-8).

3.1 Regional Emergency Control Group

3.1.1 Members of each regional department have been assigned to the Regional Emergency Control Group. Most participated in the 1983 exercise and are acquainted with the structure of the group.

3.1.2 One problem identified with the working of the Control Group was the failure of information to be disseminated properly throughout the group. During the exercise representatives were receiving information from their departments or from provincial authorities, then making decisions based on that information without consulting the rest of the group.

3.1.3 All members of the Control Group must be equally informed about activities in the affected area and protective action which is being taken.

3.1.4 The commander of the OPP detachment, Whitby, should not be a member of the Control Group.

3.2 Facility

3.2.1 18 Division of the Regional Police Force will be used as the Regional Emergency Control Centre.

3.2.2 Three separate areas should be established within the centre for the Control Group, communications and briefing. If the decision-making responsibilities of the Control Group are separated from communication functions, there should be fewer problems with the dissemination of information among group members.

3.3 Equipment

3.3.1 Every department in the region has identified the major problem with the Control Centre as the lack of telephone lines available there. The Control Group cannot be expected to function properly with the number of lines currently available at the Centre.

3.3.2 The Region should ensure that additional equipment required at the Centre is available within the police station.

3.3.3 It is desirable to have maps outlining the response sectors posted permanently in the Centre.

3.3.4 All telephones to be used by the Control Group should be protected under the Line Load Control program.

3.4 Personnel

3.4.1 No specific employees have been assigned to provide support services at the Control Centre.

3.4.2 It is likely that clerical staff, radio and telephone operators and maintenance workers will be available at the police station, but these employees must be earmarked prior to an emergency.

3.4.3 It may be possible for regional departments represented in the Control Group to provide support staff at the Control Centre. Again, these employees must be identified in advance.

3.5 Emergency Workers

3.5.1 Although plans for briefing emergency workers and bus drivers are included in the regional plan, no preparations have been made to conduct briefing sessions at the Regional Emergency Control Centre.

3.5.2 A briefing area should be set aside in the Control Centre and a Briefing Officer chosen.

SECTION 4

LOCAL INFORMATION CENTRE

4.0.1 Refer to Guide, Chapter 2, Section 4 (pages 8-9).

4.0.2 No planning has been done by the Region to establish a Local Information Centre pending receipt of guidance from the Province.

4.0.3 Provisions for an Information Centre should be included in the Regional Nuclear Emergency Plan according to the guidelines developed in the Guide, and guidance provided by the Province.

SECTION 5

EXPOSURE CONTROL CENTRE

5.0.1 Refer to Guide, Chapter 2, Section 5 (page 9).

5.0.2 The Region is responsible for operating an Exposure Control Centre in conjunction with Ontario Hydro. At present no preparations have been made for the Centre.

5.0.3 Procedures for designating, equipping and staffing the Exposure Control Centre need to be included in the regional plan. They should follow the procedures outlined in the Guide.

SECTION 6

TRANSPORTATION

6.0.1 Refer to Guide, Chapter 2, Section 6 (pages 10-11).

6.1 General Transportation Services

6.1.1 More detailed preparations need to be made to provide transportation assistance during an evacuation.

6.1.2 Pickering Dial-A-Bus has been selected to provide bus service in an evacuation, but no formal arrangements have been made with the company. The Region must determine the number of buses and drivers which will be required in each response sector. Buses may be needed from additional services such as GO Transit or Greycoach. Formal arrangements must be made with these companies as well.

6.1.3 Plans for briefing bus drivers and training them prior to an emergency need to be made.

6.2 Specialized Transportation Services

6.2.1 Few preparations have been made to provide specialized transit services during an evacuation.

6.2.2 Although institutions in the area are responsible for developing their own evacuation plans, the Region must ensure that adequate transportation services will be available from the Provincial Ambulance Network and Handi-Transit.

6.2.3 Specific arrangements should be made with Handi-Transit to provide transportation assistance to private homes during an evacuation. A telephone line should be established either at the Regional Control Centre, or by Handi-Transit itself, to receive calls from those who require transportation assistance.

6.2.4 Assistance from companies outside of the region may also be required.

SECTION 7

ASSESSMENT OF RESOURCES

7.0.1 Refer to Guide, Chapter 2, Section 7 (pages 11-12).

7.0.2 Further comments regarding assessment of resources are contained in each of the following chapters.

SECTION 8

TRAINING

8.0.1 Refer to Guide, Chapter 2, Section 8 (pages 12-13).

8.0.2 Apart from the 1983 exercise, no nuclear emergency training programs have been conducted in Durham Region.

8.0.3 More training needs to be done at the departmental level. Individual employees, as well as members of the Regional Emergency Control Group, must be familiar with the tasks they will be required to perform in a nuclear emergency.

8.0.4 In order to ensure that all municipal employees required to deal with a nuclear emergency can function effectively without being unnecessarily concerned about their own safety, the highest priority needs to be accorded to their education and training regarding a realistic assessment of the radiation hazard, and the emergency worker safety system that will be established during a nuclear emergency.

CHAPTER 3

THE DURHAM REGIONAL POLICE FORCE

SECTION 1

INTRODUCTION

1.0.1 Refer to guidelines established for police forces in the Guide, Chapter 3 (pages 14-19).

1.0.2 Police officers will be presented with few unfamiliar tasks in a nuclear emergency. But because of the potential scale of such an emergency, the department must make detailed preparations for emergency measures. The Regional Police need to develop an adequate public notification plan and a Traffic Control Plan as part of the area Joint Traffic Control Plan,and implement a nuclear emergency training program for police officers.

SECTION 2

NOTIFICATION

2.0.1 Refer to Guide, Chapter 3, Section 2 (pages 4-5).

2.1 Initial Notification

2.1.1 The Police Department has an emergency notification plan which will enable the Communications Sergeant to contact members of the Regional Emergency Control Group or their alternates once an emergency is declared.

2.1.2 The Sergeant also has a list of the schools and special care facilities located in each response sector. These facilities will be advised of protective measures which have been ordered.

2.1.3 The Communications Sergeant should be responsible for annually updating the notification plan.

2.2 Internal Notification

2.2.1 The department should ensure that all police officers, as well as clerical and maintenance staff employed by the department, can be contacted and assembled on a 24-hour basis.

2.2.2 The department should establish a fan-out notification plan for all departmental staff.

2.2.3 Staff and officers at 18 Division in Whitby, which has been chosen as the Regional Emergency Control Centre, should be included in notification plans.

2.3 Public Notification

2.3.1 No preparations have been made by the police to notify the affected population of emergency measures.

2.3.2 Alerting routes need to be established in each response sector so that police vehicles equipped with sound systems can be dispatched along pre-determined routes during an emergency. The department should have an estimate of the number of vehicles and officers which will be required in each sector.

SECTION 3

REGIONAL EMERGENCY CONTROL GROUP

3.0.1 Refer to Guide, Chapter 3, Section 3 (page 16).

3.0.2 The Police Department will provide a representative to the Control Group: the Chief of Police, with his alternate being the Deputy Chief.

3.0.3 18 Division Headquarters in Whitby has been chosen as the Regional Emergency Control Centre. Thus, the Police Department will be responsible for equipping and staffing the Control Centre.

3.0.4 Clerks, as well as radio and telephone operators, at the police station should be advised that they may be required to work extended hours during an emergency. Specific employees should be assigned to the Control Centre prior to an emergency.

3.0.5 Every regional department, including the police department, has expressed concern about the lack of

telephone lines at the Control Centre. It is essential that each representative in the Control Group has a telephone reserved for his or her exclusive use. It is highly recommended that the department investigate the possibility of installing several more permanent telephone lines at 18 Division. The department must also ensure that adequate radio equipment is available at the station.

SECTION 4

PROTECTIVE MEASURES

4.0.1 Refer to Guide, Chapter 3, Section 4 (pages 16-18).

4.0.2 The main responsibilities of the Regional Police in a nuclear emergency will be public notification, implementation of the traffic control plan, and maintenance of law and order.

4.0.3 A Traffic Control Plan has not yet been developed by the region. Once the plan has been established, the police force must determine the amount of equipment and the number of officers which will be required to implement each phase of the plan.

4.0.4 Public notification will be carried out according to the alerting routes outlined in the public notification plan. Such a plan has yet to be made.

SECTION 5

ASSESSMENT OF RESOURCES

5.0.1 Refer to Guide, Chapter 3, Section 5 (page 18).

5.0.2 It will be necessary for the department to have a more precise idea of both the officers and equipment which will be available to the department during a nuclear emergency.

5.0.3 It is also necessary for the department to compile a specific inventory of equipment and personnel required in a nuclear emergency to carry out its responsibilities.

SECTION 6

Training

6.0.1 Refer to Guide, Chapter 3, Section 6 (page 19).

6.0.2 Police officers have not received adequate training which will prepare them to act efficiently during a nuclear emergency. It is important that the department organize a training program for its officers. More than any other emergency workers, police should understand not only their individual responsibilities, but the broad scenario of dealing with a nuclear emergency.

CHAPTER 4

THE DURHAM REGION SOCIAL SERVICES DEPARTMENT

SECTION 1

INTRODUCTION

1.0.1 Refer to guidelines established for the Social Services Department in Guide, Chapter 4 (pages 20-32).

1.0.2 The Social Services Department is aware that its responsibilities during a nuclear emergency will be both sizeable and unfamiliar, a factor which distinguishes it from other departments in the region.

1.0.3 Social Services takes nuclear emergency planning seriously. It has given a certain amount of thought to emergency measures, but little tangible planning has been done by the department. Detailed preparations must be made for a nuclear emergency.

1.0.4 There exist two chief weaknesses with departmental planning at present:

(a) Social Services is not prepared to handle the number of evacuees it will be responsible for in a general evacuation. Of the 107,000 people in the Primary Zone, Durham, as host municipality, is assigned 63,000. Social Services has indicated that it may only be capable of providing services for 6,000 evacuees.

(b) The department has not planned to establish separate Reception and Evacuee Centres. It plans to operate Evacuation Centres which will combine the functions of both.

SECTION 2

NOTIFICATION

2.0.1 Refer to Guide, Chapter 4, Section 2 (pages 20-21).

2.1 Initial Notification

2.1.1 In order for Social Services to open, equip and staff several Reception and Evacuee Centres, the department must be advised as soon as the possibility of an evacuation becomes likely.

2.1.2 Social Services has expressed concern that in the past it has not been alerted to emergency situations which could potentially involve the department.

2.1.3 Because of the possible magnitude of a nuclear emergency and the scale on which the department will be required to act, Social Services must be notified before an evacuation is ordered.

2.2 Internal Notification

2.2.1 The Department of Social Services is well rehearsed in emergency notification procedures. Social Services has an informal fan-out notification plan for departmental staff which was practised during the Pickering 83 exercise. The department attempted to contact as many field staff as possible, with a reasonable amount of success.

2.2.2 Employees who will be required in a nuclear emergency should be pre-designated and included in a formal fan-out notification plan.

2.3 External Notification

2.3.1 The Ministry of Community and Social Services is contacted automatically in a nuclear emergency, although it will provide no resources or personnel to Durham. The Ministry is notified for authorization purposes, rather than actual assistance.

2.3.2 Social Services Departments in neighbouring regions are not contacted initially, despite the fact that Durham may rely on support from other regional departments. It is likely that Metro Toronto will provide aid to Durham in a nuclear emergency. Thus, the department should establish procedures for contacting Metro in an emergency.

2.3.3 The Administrator of Day Care Services will be responsible for alerting day nurseries under the jurisdiction of the department. She should have available a list of Day Care Centres in each response sector.

2.3.4 The department has established a contact in each of the Red Cross Branches in the region. Similar contacts need to be established for other volunteer agencies in the region. (Refer to Section 5 below).

2.3.5 Social Services will also be responsible for notifying representatives of the amateur radio operators network who will initiate an emergency fan-out notification plan.

SECTION 3

REGIONAL EMERGENCY CONTROL CENTRE

3.0.1 Refer to Guide, Chapter 4, Section 3 (page 21).

3.0.2 The Commissioner of Social Services will represent the department in the Regional Emergency Control Group. His alternate will be the Director of Family Services.

3.0.3 Social Services is in the process of purchasing radio equipment which will be used at the Control Centre to communicate with departmental staff and personnel at Reception and Evacuee Centres. The department may also request that a volunteer radio operator supply communications equipment to the Control Centre.

3.0.4 The department anticipates using the Control Centre as the central communications point. Reception and Evacuee Centres, field staff and departmental personnel will report to the Control Centre and information will be passed on to appropriate sources. Therefore, the department must ensure that adequate communications equipment is available to each of the above.

SECTION 4

RECEPTION AND EVACUEE CENTRES

4.0.1 Refer to Guide, Chapter 4, Sections 4,5, and 6 (pages 22-29.)

4.1 Introduction

4.1.1 Social Services has not planned to set up both Reception and Evacuee Centres. At present the department plans to establish Evacuation Centres which will carry out the joint functions of Registration and Inquiry, decontamination, and emergency feeding and lodging services.

4.1.2 There are several reasons why the two facilities should be separate:

(a) The purpose of Reception Centres is to process all evacuees as quickly as possible shortly after they leave the Primary Zone, and before they can disperse. The purpose of the Evacuee Centres is quite separate. They will provide temporary food and accommodation to those who require them.

(b) Different types of facilities and personnel will be necessary at each Centre. As a result, differing types of building can be used. Whereas a Reception Centre facility requires a large outdoor area, an Evacuee Centre facility requires smaller rooms as well as extensive washroom and food service facilities. Moreover, whereas Reception Centres require staff familiar with Registration and Inquiry procedures, as well as radiation monitoring and decontamination, Evacuee Centres could be operated almost entirely by volunteers.

(c) Far fewer evacuees will require the temporary food and accommodation available at Evacuee Centres, whereas all evacuees should pass through a Reception Centre.

4.2 Facilities

4.2.1 Reception and Evacuee Centres have not yet been chosen for Durham Region. When suitable facilities have been identified, particular Centres need to be allocated for each response sector.

4.2.2 The Evacuation Centres which are designated in the current regional plan, Ajax and Dunbarton High Schools, are inappropriate for the following reasons:

(a) The buildings are located too close to the generation station, well inside the Primary Zone.

(b) They do not have the capacity to handle the number of evacuees which can be expected.

(c) The facilities are not equipped to provide separate Reception and Evacuee Centres.

4.2.3 Social Services has suggested that in addition to providing temporary food and accommodation at Evacuee Centres, arrangements could be made to billet evacuees with members of the community. This is unlikely to be necessary for the short period envisaged.

4.3 Equipment

4.3.1 Few preparations have been made to provide necessary resources to Reception and Evacuee Centres. Although Social Services is hoping most equipment will be available at the designated facilities, the department cannot depend on this fact.

4.3.2 Social Services must make adequate plans to obtain all necessary equipment prior to an emergency. This will include:

(a) tables and chairs;

(b) beds and blankets;

(c) food and clothing;

(d) communications equipment.

4.3.3 Registration and Inquiry equipment (file boxes, index cards, and pens) has been set aside at the department and will be transported to Reception Centres during an emergency.

4.3.4 The department has made informal arrangements with a local catering firm to provide food services during an emergency. The caterer has accepted responsibility for preparing food and transporting it to Evacuee Centres.

4.3.5 More definite arrangements need to be made. First, the department must determine the amount of food the company is capable of preparing. Planning for Evacuee Centres should not fall below 25% of the anticipated total number of evacuees. If Durham is responsible for 63,000 possible evacuees, it should plan that 16,000 evacuees will require temporary food and accommodation.

4.3.6 Second, a contract or letter of agreement should exist between Social Services and any private firms engaged by the department. It must specify the amount of food which the company may be expected to provide and the Evacuee Centre(s) where it will be required.

4.3.7 The department has also proposed opening food service facilities to inmates remaining behind in institutions which have been evacuated. However, no plans have been made to provide food or cooks to the facilities, or to transport food to Evacuee Centres. Further preparations need to be made in this area.

4.3.8 All arrangements to supply food to evacuees must be made well in advance. It is not the type of service which can be arranged quickly during an emergency.

4.4 Personnel

4.4.1 The department plans to dispatch personnel to Reception and Evacuee Centres according to the number of staff available at the time of the emergency. Coordinators for each Centre will also be appointed at the time of the emergency.

4.4.2 However, emergency centre staff must be pre-designated. Social Services cannot rely on those employees who might be available in a nuclear emergency. Reception and Evacuee Centre staff and coordinators must be identified prior to an emergency. They must be aware of what their responsibilities will be during an emergency, and they must be prepared to carry out those responsibilities. Alternates should be appointed for each key position.

4.5 Counselling Services

4.5.1 Social Services acknowledges the need for personal counselling following a nuclear emergency. Family counsellors in the department may be capable of providing a counselling program, but no arrangements have been made.

4.5.2 Plans to dispatch counsellors to Evacuee Centres during an emergency and to establish a counselling service following an emergency should be made by the department.

SECTION 5

VOLUNTEER ORGANIZATIONS

5.0.1 Refer to Guide, Chapter 4, Section 7 (pages 29-30).

5.0.2 The Department of Social Services plans to rely on volunteer staff from the Red Cross to operate Reception and Evacuee Centres. The department anticipates that only one Social Services coordinator may be required at each centre.

5.0.3 If the department plans to use volunteers to this extent, it must determine what services can be provided by volunteer agencies.

5.0.4 The Ajax-Pickering Branch of the Red Cross has access to approximately 100 volunteers. The branch has a mandate through the municipalities to provide Registration and Inquiry Services during an emergency. Sickroom equipment, such as wheelchairs, crutches and beds, may be available in very limited quantities from the branch.

5.0.5 It is unlikely that the Red Cross will be able to provide emergency services on the scale which the department has anticipated.

5.0.6 Social Services must allocate specific responsibilities to volunteer agencies based upon the services they will be capable of providing. A formal agreement outlining the duties required in a nuclear emergency should be drafted with each agency.

SECTION 6

ASSESSMENT OF RESOURCES

6.0.1 Refer to Guide, Chapter 4, Section 8 (page 31).

6.0.2 At present there exists no record of resources available to the department in an emergency, because little preparation has been done to earmark equipment for Reception and Evacuee Centres.

6.0.3 Social services should prepare a detailed inventory of all resources, supplies and personnel needed at each Centre.

SECTION 7

TRAINING

7.0.1 Refer to Part I, Chapter 4, Section 9 (pages 31-32).

7.0.2 Social Services would like to initiate a training program for all departmental staff. When more nuclear emergency planning has been done by the department and employees have been assigned specific tasks, a comprehensive training program should be designed. Ontario Hydro may be able to assist in the development of a training program.

CHAPTER 5

THE DURHAM REGION BOARD OF EDUCATION AND DURHAM REGION ROMAN CATHOLIC SEPARATE SCHOOL BOARD

SECTION 1

INTRODUCTION

1.0.1 Refer to guidelines established for the School Boards in Guide, Chapter 5 (pages 33-40).

1.0.2 The Board of Education is not prepared for a nuclear emergency. It is unfamiliar with emergency procedures and unaware of the schools which may be affected by a nuclear emergency. The Public School Board must become more involved in nuclear emergency planning.

1.0.3 There are 21 Public schools in the Primary Zone with a total student population of approximately 11,000. Several schools outside of the Primary Zone will also be used as Reception and Evacuee Centres.

1.0.4 The Board must identify those schools which are located in the Primary Zone, and among those, schools situated closest to the generating station.

1.0.5 Schools which will be used as Reception and Evacuee Centres must also be identified.

1.0.6 The Separate School Board will play a smaller role than the Public Board in a nuclear emergency. This is a result of several factors: there are fewer separate schools in the Primary Zone; students are bused to those schools; and no separate schools have been designated as Reception and Evacuee Centres.

1.0.7 The Separate School Board will be responsible for over 3,000 students in six schools inside of the Primary Zone. The schools house children from junior kindergarten to grade eight.

1.0.8 Generally, the Separate Board is more prepared for a nuclear emergency than the Public Board. It has also done more planning and conducted more training sessions.

SECTION 2

NOTIFICATION

2.0.1 Refer to Guide, Chapter 5, Section 2 (pages 33-34).

2.1 Initial Notification

2.1.1 The Public School Board is in the process of designating an Officer of Safety who will receive notification of a nuclear emergency and represent the Board in the Regional Emergency Control Group. At present, the Board is uncertain about who will coordinate emergency activities.

2.1.2 The Director of Education at the Separate School Board will receive initial notification of a nuclear emergency. He will advise the Transportation Officer who will commence transportation services.

2.1.3 Both Boards will advise the Chairman of the Board of Trustees and, if necessary, an emergency meeting will be convened.

2.1.4 The Police Communications Sergeant is responsible for contacting schools in the affected area and advising them of protective measures which have been ordered. It will be useful for the Communications Sergeant to have a record of the principal and vice-principal at each school. A list of this kind should be updated annually by each School Board.

2.1.5 The Separate School Board has requested that a police officer be sent to each school to confirm notification of a nuclear emergency. Because it is unlikely that the police force will have officers available for this task, both School Boards may wish to confirm notification with school principals over the telephone.

2.2 Internal Notification

2.2.1 Neither Board has a fan-out notification plan for departmental employees, a factor which may make it difficult to assemble staff quickly in an emergency.

2.3 Public Notification

2.3.1 The Separate School Board will attempt to notify all parents with children in affected schools. An informal fan-out notification plan currently exists among parents at each school.

2.3.2 A fan-out telephone notification system for parents should not be used as it will overload the telephone system. Instead, notification should be through announcements made via the media concerning all affected schools in the region. All information should be broadcast through stations designated for emergency use, CKAR and CHOO. Announcements should be made through the Local Information Centre.

SECTION 3

REGIONAL EMERGENCY CONTROL GROUP

3.0.1 Refer to Guide, Chapter 5, Section 3 (page 35).

3.0.2 Neither the Public nor the Separate School Board was represented in the Regional Emergency Control Group during the Pickering 83 exercise.

3.0.3 As both School Boards will play a major role in a nuclear emergency, it is essential they be represented in the Control Group during future exercises and in the event of an emergency.

3.0.4 The Public School Board is not certain that it should be represented in the Control Group if an emergency occurs when school is not in session. Even if schools do not have to be evacuated, the Board will be responsible for providing Reception and Evacuee Centre facilities, as well as transportation assistance.

3.0.5 Telephone will be the primary mode of communication for both School Boards at the Control Centre to contact School Board offices as well as individual schools. One telephone must be reserved for the exclusive use of each School Board at the Control Centre.

SECTION 4

PROTECTIVE MEASURES

4.0.1 Refer to Guide, Chapter 5, Section 4 (pages 35-38).

4.0.2 Both the Public and the Separate School Board have policies on special dismissals. However, these should be checked to ensure they conform to the guidelines in sub-section 4.1, Chapter 5 of the Guide.

4.0.3 Principals and teachers must be aware that they will be responsible for any students who remain in the school building until they are collected by parents or can be sent home.

4.1 School Evacuation

4.1.1 Public Schools located in the Primary Zone do not have nuclear emergency evacuation plans. Many principals are unaware their schools may be affected by an accident at the Pickering Nuclear Generating Station. Teachers, staff and students at all schools are unacquainted with what they may be required to do during a nuclear emergency.

4.1.2 Not only must possibly affected schools be identified by the Board of Education, but all individuals who will be involved in a nuclear emergency must be familiar with their responsibilities before an emergency occurs.

4.1.3 Specific procedures for evacuation during a nuclear emergency must be included in emergency plans for each school. These plans should be rehearsed regularly along with fire drill procedures.

4.1.4 All Separate Schools have in-house evacuation plans which will be used during a nuclear emergency. Principals also have a copy of the school evacuation procedures included in the Durham Region Nuclear Emergency Plan.

4.1.5 All students are bused to Separate Schools in the Primary Zone. During an evacuation the Transportation Officer will be responsible for contacting drivers and advising them to pick up buses and proceed to schools as usual. The Transportation Officer must ensure that all drivers can be contacted during the day. She should be familiar with the location of all buses at any given time.

4.1.6 Evacuation will pose more of a problem for the Public Board than the Separate Board, because students are not normally bused to Public schools.

4.1.7 It will be necessary for the Board of Education Transportation Manager to estimate the number of buses which will be required to transport students, staff and teachers at each school. She will then have to determine how buses will be provided to each school. Private contractors normally engaged by the Board may not be able to supply the number of buses which will be necessary. The Separate School Board may have surplus buses which could be used by the Public Board. School Boards and private contractors in other regions may also be able to provide additional buses.

4.1.8 Any arrangements for the provision of buses and drivers during an emergency must be made well in advance. The Transportation Manager should prepare a detailed plan for the evacuation of all 21 schools in the Primary Zone.

4.1.9 It may be useful for the two School Boards to coordinate transportation planning in order to share resources.

4.1.10 Established means for contacting private contractors and drivers on a 24-hour basis must be in place prior to an emergency. The Public School Board has indicated it may have problems contacting drivers, most of whom are employed part-time. Drivers must be aware they may be called upon during an emergency.

4.1.11 The Separate School Board has expressed concern that school evacuation plans may not be realistic for junior kindergarten pupils. All six Separate schools in the Primary Zone have junior kindergarten classes. It will take longer for teachers to organize and dress four-year-old junior kindergarten students than older children.

4.1.12 Each school will be pre-assigned to a Reception Centre once they have been selected for the region. The principal of each school should be familiar with the evacuation route and Reception Centre which have been designated for his or her school.

4.1.13 It may also be useful if regular drivers at Separate schools are also acquainted with the evacuation route and Reception Centre for their school.

4.2 Transportation Services

4.2.1 The Public School Board is not aware it may be required to supply buses and drivers to transport members of the general public during an evacuation.

4.2.2 This task has been assigned to both School Boards in the Durham Region Nuclear Emergency Plan. If it will not be feasible for the Board of Education to coordinate such a service during a nuclear emergency, the task should be re-assigned within the Control Group.

4.2.3 Both School Boards should have an estimate of the number of buses which will be available during an evacuation. From that number they should be able to determine the number of buses which they could supply to the Region to transport members of the public.

4.2.4 Provisions must be made for assembling buses and drivers outside of school hours on a 24-hour basis.

4.3 Reception and Evacuee Centre Schools

4.3.1 Schools which may be used as Reception and Evacuee Centres have not yet been chosen for the region. The schools specified in the regional plan, Ajax and Dunbarton High Schools, are unsuitable due to their proximity to the generating station and limited capacity.

4.3.2 At present, the principals of Ajax and Dunbarton High Schools are unaware their facilities have been designated for use during a nuclear emergency. Principals, teachers, staff and students at each school which will be designated as a Reception or Evacuee Centre must be aware the building will be used during a nuclear emergency.

4.3.3 Furthermore, no provisions exist for opening school buildings outside of regular hours. The Regional Emergency Control Group must have an established means for contacting the Custodial Manager of both School Boards so that school buildings may be opened, lighted and heated properly before evacuees arrive.

SECTION 5

LOCAL INFORMATION CENTRE

5.0.1 Refer to Guide, Chapter 5, Section 5 (page 39).

5.0.2 School Board representatives on the Regional Emergency Control Group should know the set-up at the Local Information Centre, and be prepared to issue regular public announcements through the Centre. For this purpose a series of standard announcements for various events or stages should be prepared in advance.

SECTION 6

ASSESSMENT OF RESOURCES

6.0.1 Refer to Guide, Chapter 5, Section 6 (page 39).

6.0.2 Transportation Managers at both School Boards are familiar with the number of buses and drivers at their disposal. It will be necessary for both Boards to determine whether this number will be sufficient for a general evacuation of the Primary Zone.

6.0.3 The Public Board will have to determine the number of buses which will be required at each school, based on the total population. If necessary, arrangements should be made to obtain equipment and personnel from outside sources.

6.0.4 The Board of Education should also have a record of the resources and equipment contained in each Reception and Evacuee Centre school.

SECTION 7

TRAINING

7.0.1 Refer to Guide, Chapter 5, Section 7 (pages 39-40).

7.0.2 Members of the Public School Board have received no specific training in nuclear emergency procedures. The School Board is aware that administrators, principals, teachers, staff and students are unprepared to act efficiently during a nuclear emergency.

7.0.3 The Board of Education would like to see an extensive program of instruction and rehearsal in its schools. Such a program should be developed by the Board in conjunction with Ontario Hydro and implemented as soon as possible.

7.0.4 All principals in the Separate School Board have a copy of the Regional Nuclear Emergency plan and are familiar with what their responsibilities will be during an emergency. Principals have received a tour of the Pickering Nuclear Generating Station and are acquainted with the operation of the plant. Parents' groups at schools nearest the generating station, such as Holy Redeemer, are aware of the various emergency measures which will affect their children.

7.0.5 Both School Boards agree that bus drivers should receive training prior to an emergency; however, neither Board has implemented such a program. Joint driver training programs should be established by the two School Boards.

7.0.6 Sheltering and evacuation procedures should be rehearsed regularly at schools located within the Primary Zone.

CHAPTER 6

DURHAM REGIONAL HEALTH UNIT

SECTION 1

INTRODUCTION

1.0.1 Refer to guidelines established for the Public Health Department in the Guide, Chapter 6 (pages 41-45).

1.0.2 There is a great discrepancy between the responsibilities outlined for the Health Unit in the Regional Nuclear Emergency Plan and what the Medical Officer of Health believes the department is capable of performing in a nuclear emergency. The Medical Officer of Health is not comfortable with the responsibilities which have been assigned to the Health Unit. For this reason, the Health Unit's role in a nuclear emergency should be reassessed.

1.0.3 The Health Unit cannot be expected to take part in radiation monitoring and decontamination procedures. This will be the responsibility of Ontario Hydro. Nor is the department capable of briefing emergency workers on nuclear safety and providing them with protective equipment. This will be the function of the Exposure Control Centre.

1.0.4 The responsibilities of the MOH and the Durham Regional Health Unit should be those outlined in the Guide, Chapter 6.

SECTION 2

NOTIFICATION

1.0.1 Refer to Guide, Chapter 6, Section 2 (page 41).

2.0.2 Emergency notification procedures have been established by the Health Unit in its Emergency Plan. The department has a complete fan-out notification system which was partially activated during the Pickering 83 exercise. The department was able to contact most Health Inspectors in the region.

2.0.3 The Health Unit plans to inform the provincial Ministry of Health, although the Ministry will play a limited role in an emergency. The department will also contact the

Medical Officers of Health for Scarborough and the City of Toronto. If additional personnel or equipment is required by the Durham Unit, it will be provided by the Scarborough and Toronto Units.

SECTION 3

REGIONAL EMERGENCY CONTROL GROUP

3.0.1 Refer to Guide, Chapter 3, Section 3 (page 41).

3.0.2 The MOH and the Director of Environmental Health Services will represent the Health Unit in shifts on the Regional Emergency Control Group.

SECTION 4

PROTECTIVE MEASURES

4.0.1 Refer to Guide, Chapter 6, Section 4 (pages 42-44).

4.0.2 The department should prepare plans and procedures to carry out the tasks assigned to it in the Guide.

SECTION 5

CURRENT RESOURCES

5.0.1 Refer to Guide, Chapter 6, Section 5 (pages 44-45).

5.0.2 Now that the responsibilities of the Health Unit have been redefined, it will be necessary for the Unit to assess the resources and personnel it has available to carry out those tasks.

5.0.3 The Health Unit must determine whether it will require assistance from Public Health Departments outside of the region. If so, personnel and equipment provided by those departments should be included in an emergency resource inventory.

SECTION 6

TRAINING

6.0.1 Refer to Guide, Chapter 6, Section 6 (page 45).

6.0.2 No specialized training has been conducted by the department to prepare staff for a nuclear emergency. It is unlikely that personnel will require additional medical training, but they should be well acquainted with the tasks they will be performing in a nuclear emergency.

CHAPTER 7

DURHAM REGION FIRE HEADQUARTERS

SECTION 1

INTRODUCTION

1.0.1 Refer to guidelines established for municipal Fire Departments in the Guide, Chapter 7 (pages 46-48).

1.0.2 The municipal Fire Departments in Durham will be responsible for hosing down contaminated vehicles at Reception Centres and the Exposure Control Centre, in addition to providing regular firefighting and rescue services throughout the region.

1.0.3 Many of the responsibilities which have been assigned to the Fire Department in the Regional Nuclear Emergency Plan will no longer be part of emergency measures. The Pickering Fire Hall will not be used as an off-site operations centre; nor will firefighters distribute instruction sheets to homes in affected sectors.

SECTION 2

NOTIFICATION

2.0.1 Refer to Guide, Chapter 7, Section 2 (page 46).

2.0.2 The Fire Headquarters in Whitby has rehearsed notification procedures for all departments in the region and the Scarborough department.

2.0.3 Established procedures exist for alerting all firefighters, including volunteers, in an emergency situation.

SECTION 3

REGIONAL EMERGENCY CONTROL GROUP

3.0.1 Refer to Guide, Chapter 7, Section 3 (pages 46-47).

3.0.2 The Fire Coordinator must ensure that telephones at Fire Headquarters and Fire Halls are protected under the Line Load Control program.

SECTION 4

PROTECTIVE MEASURES

4.0.1 Refer to Guide, Chapter 7, Section 4 (page 47).

4.0.2 The Fire Department will be responsible for providing trucks and firefighters at Reception Centres and the Exposure Control Centre to hose down contaminated vehicles.

4.0.3 Once Reception Centres have been designated for the region, the Fire Coordinator will have to determine the amount of equipment and number of fire fighters which will be required at each. He should also establish which department will provide the resources, estimating the response time of that department.

4.0.4 A problem identified by the Fire Department during the Pickering 83 exercise was the absence of fire hydrants at Reception Centres. Without a water supply tanker trucks and additional firefighters were required at each Centre. The region must ensure that Reception Centres are equipped with an adequate water supply.

4.0.5 An additional problem identified during the exercise was the limited number of firefighters available in the region. While required to perform emergency measures, the Fire Department is also responsible for maintaining regular firefighting and rescue services during a nuclear emergency. Even when vehicles and firefighters are called into the area from all municipalities in the region, there will be a limited amount of support which the Fire Department can provide.

4.0.6 The Fire Coordinator has stressed that the Department cannot accept additional responsibilities, such as aiding in police notification or the evacuation of special care institutions.

4.0.7 The department should, however, ensure that a sufficient number of firefighters are available at each Reception Centre and at the Exposure Control Centre.

SECTION 5

ASSESSMENT OF RESOURCES

5.0.1 Refer to Guide, Chapter 7, Section 5 (page 47).

5.0.2 Since Scarborough will itself be involved in measures to deal with the nuclear emergency, reliance should not be placed on reinforcements from it.

SECTION 6

TRAINING

6.0.1 Refer to Guide, Chapter 7, Section 6 (page 48).

6.02. The Whitby Fire Department conducted a mutual aid exercise in 1983 which involved all Fire Departments in Durham as well as the Scarborough department. The exercise established the approximate emergency response time for each department.

6.0.3 In addition, Durham firefighters have participated in a nuclear emergency training program with Scarborough which was conducted by Ontario Hydro. Some firefighters are familiar with radiological monitoring equipment.

CHAPTER 8

DURHAM REGION PUBLIC WORKS DEPARTMENT

SECTION 1

INTRODUCTION

1.0.1 Refer to guidelines established for the Public Works Department in the Guide, Chapter 8 (pages 49-52).

1.0.2 The Durham Region Public Works Department does not presently perceive a need for nuclear emergency planning. The department has done no specific planning for a nuclear emergency, because it expects to follow routine operations.

1.0.3 However, two factors particular to a nuclear emergency necessitate pre-emergency planning in the Works Department:

(a) The potential magnitude of an off-site emergency at the Pickering Nuclear Generating Station entails that the department is aware of its responsibilities prior to an emergency and has assessed its capability to carry out those responsibilities.

(b) Because of the degree of cooperation which will be required between various departments and organizations, an effective notification and communications system must be established prior to an emergency. The department must also be familiar with the organizational structure which will be in place during a nuclear emergency.

SECTION 2

NOTIFICATION

2.0.1 Refer to Guide, Chapter 8, Section 2 (pages 49-50).

2.1 Initial and Internal Notification

2.1.1 The Public Works Department is prepared for notification of a nuclear emergency both during business hours and outside of them. Administrators will be notified first,

the foreman of the 24-hour standby crew alerted, and field staff assembled. Because the department is acquainted with 24-hour emergency notification, it should not pose a problem during a nuclear emergency.

2.2 External Notification

2.2.1 The Works Department does not plan to contact any external organizations in an emergency. This should be rectified.

2.2.2 First, it is clear that Regional Works considers that its responsibility ends with regional roads. For this reason, municipal departments must not only be involved in emergency procedures, the regional department must coordinate its activities with those of the municipalities. Clearly defined areas of responsibility need to be established.

2.2.3 Second, public utility companies, such as Consumers' Gas, are the responsibility of the Public Works Department, and there is a need for their activities to be coordinated with emergency procedures. 24-hour contacts should be established with each company.

SECTION 3

REGIONAL EMERGENCY CONTROL CENTRE

3.0.1 Refer to Guide, Chapter 8, Section 3 (page 50).

3.0.2 The Department of Public Works plans to coordinate operations from departmental offices. The Commissioner of Works will be the sole representative of the department at the Operations Centre, and will be responsible for relaying all directives from the Control Group to the department by telephone.

3.0.3 The Director of Operations has identified two weaknesses with the Operations Centre: the lack of telephone lines; and inadequate dissemination of information within the Centre during the Pickering 83 exercise. These are precisely the services on which the Public Works Department presently depends.

3.0.4 It is necessary for the Public Works Department to ensure there is a telephone line reserved exclusively for the department at the Operations Centre. It may also be

advisable to designate a radio or telephone operator to work at the Centre, so that communications duties are separated from the decision-making responsibilities of the Commissioner.

SECTION 4

PROTECTIVE MEASURES

4.0.1 Refer to Guide, Chapter 8, Section 4 (pages 50-51).

4.0.2 The Public Works Department is not familiar with any specific responsibilities it will have during a nuclear emergency, other than to provide equipment as directed by the Regional Police. It is important for the department to become familiar with designated traffic control points and evacuation routes once a Traffic Control Plan has been finalized. This will enable the department to assess the services it will be capable of performing in an emergency.

4.0.3 The department cannot depend solely on directives during an emergency. Public Works must establish precisely what its responsibilities will be prior to an emergency, and prepare for them.

4.0.4 The department should establish liaison with public utility companies and undertake joint planning with them.

SECTION 5

ASSESSMENT OF RESOURCES

5.0.1 Refer to Guide, Chapter 8, Section 5 (pages 51-52).

5.0.2 The Public Works Department maintains that resource inventories are not useful. Yet, considering that a large amount of equipment and personnel may have to be mobilized during a nuclear emergency, even an approximate resource inventory will be valuable to the department.

5.0.3 An inventory of the types and amount of equipment housed in depots in the region can be used by the department to assess its capabilities during an emergency.

SECTION 6

TRAINING

6.0.1 Refer to Guide, Chapter 8, Section 6 (page 52).

6.0.2 The only specific training requested by the Works Department is instruction in emergency worker safety prior to an emergency.

6.0.3 The department acknowledges that there may be a problem with employee absenteeism in the event of a serious nuclear emergency. One method of controlling this is a training program which familiarizes Works employees with the nature of a nuclear emergency and emergency worker safety measures.

SECTION 7

DUFFINS CREEK WATER POLLUTION CONTROL PLANT

7.0.1 The Duffins Creek Water Pollution Control Plant, which operates under the jurisdiction of the Regional Works Department, provides sewage treatment facilities for the towns of Ajax and Pickering, as well as York Region. The plant is situated on Lake Ontario beside the Pickering Nuclear Generating Station. As a result, the plant will be immediately affected by an off-site emergency at the generating station.

7.0.2 The Duffins Creek plant is designed in such a manner that it cannot be shut down in less than three days. The Director of Operations has expressed concern that the plant does not presently employ enough workers to shut down the facility over a three day period, considering they would be required to work short shifts. Currently the plant employs approximately 65 staff members in three shifts of 20 workers.

7.0.3 An additional concern is the spontaneous evacuation which may occur during a nuclear emergency. Among those who evacuate may be employees of the Duffins Creek plant.

7.0.4 No plan has been established which outlines procedures for closing the plant during a nuclear emergency. Such a plan should be jointly drafted by the plant Superintendent, the Commissioner of Works and the Emergency Planning Office and included in the regional plan.

7.0.5 In addition to detailed plans for closing the plant, a training programme for employees may also be valuable. This will ensure a safe and efficient shut down of the plant and may limit the number of employees who do not report for work.

7.0.6 It may also be necessary to have Regional Works employees dispatched to the plant during a nuclear emergency. This may involve training Works employees in the shut down procedures prior to an emergency.

SECTION 8

REGIONAL EXPENDITURES

8.0.1 In the Durham Region Nuclear Emergency Plan the Department of Public Works has been assigned the task of keeping an accurate record of the cost involved in emergency measures.

8.0.2 While the Works Department will automatically keep a record of departmental expenditures in an emergency, they are not prepared to assess regional expenditures. A plan to carry out this task should be outlined by the department, or the task reassigned.

ANNEX A

INTERVIEWS

Departmental representatives interviewed for this report are listed below:

Staff Sergeant Dan Matthews
Emergency Planning Coordinator
Durham Region

Superintendent Trevor McCagherty
Executive Officer,
Durham Regional Police Force

Mr. Gary Cubitt
Director of Family Services
Durham Region Social Services Department

Mr. Ron Dancey
Administrator of General Assistance,
Durham Region Social Services Department

Mr. Bruce Walker
Superintendent of Curriculum and Programs,
Durham Region Board of Education

Mr. Joseph Cooper
Superintendent of Education,
Durham Region Roman Catholic Separate School Board

Dr. Jean Gray
Medical Officer of Health,
Durham Regional Health Unit

Mr. Brian Devitt
Director of Environmental Health Services,
Durham Regional Health Unit

Chief Edward Crouch
Durham Region Fire Coordinator

Mr. Jack McCorkell
Director of Operations,
Durham Region Public Works Department

Detachment Commander
Ontario Provincial Police - Whitby Detachment